

## **REMARKS**

In view of the above amendments and following remarks, reconsideration of the rejections that are contained in the Office Action of August 7, 2007 is respectfully requested.

In the Office Action, the Examiner initially states that the claim amendments set forth in the response dated October 2, 2006 meant that the application of 35 U.S.C. §112, sixth paragraph was no longer applicable, as the claims provide sufficient structure for the means for preventing an inflection point. Without agreeing or disagreeing with the Examiner's point, it is noted that this does not relieve the Examiner of the burden of meeting the structural and functional limitations that are contained within the claim.

In paragraph 3 on page 2 of the Office Action, the Examiner stated that the application currently names joint inventors. This statement by the Examiner appears to be in error, as the present invention is solely the invention of Mr. Eiichi Kameda. It is respectfully submitted and believed that this is clear from the records in the application.

The Examiner rejected claims 18-20 and 22-24 as being unpatentable over the previously cited and discussed patent to Hamada et al., U.S. 5,644,124 (Hamada). However, claim 18 is not rendered obvious by Hamada.

As previously discussed, Fig. 1(b) illustrates an example of how adjustment layers can be provided on both ends of a layered structure as well as at at least two locations therebetween. Also note for example Table 2, presenting another example. In this example, layers 1, 2, 10, 11, 18-22 and 40, of the total of 40 layers of the multilayer film 3, are adjustment layers 3d.

Claim 18 requires that the multilayer film is structured so as to form a sharpness preventing means for providing an inflection point at a wavelength, within a change wavelength band in which transmittance changes sharply, which prevents a sharp change in transmittance in a predetermined wavelength band. The sharpness preventing means comprises optical film thicknesses of each thin film of the first and second thin films having substantially the same optical film thickness and at least one of the plurality of layers. Further, the sharpness preventing means further comprises adjustment layers that are provided at at least two locations between the pluralities of layers as well as at both

ends of the layered structure, the adjustment layers preventing an amount of change in transmittance from changing sharply between the plurality of layers.

As described in the background of the invention, the object is to provide a ray cut filter that prevents transmittance from changing sharply over a predetermined wavelength band, for example the visible region, in order to obtain transmittance characteristics that approximate those that are perceived by the human eye. This is achieved by the present invention as reflected by independent claim 18.

The Hamada patent has been cited by the Examiner on a number of occasions at this point, but clearly fails to meet the limitations of claim 18.

The Examiner refers to a matching layer C as an adjustment layer, and further refers to "low refractive layers 2 and 30" as forming adjustment layers. The Examiner further notes that, from column 8, lines 27-41, more than one matching layer can be used in addition to the uppermost layer. (The statement in Hamada is in fact that there may arise a need of adding, to the uppermost layer, a matching film of a low refractive index for matching between the optical multilayer filter 30 and the transparent resin of the resin portion 3.)

In fact, matching layer C, which is only provided at one location, adjacent to the light-receiving substrate 2, serves as an antireflection film for the light-receiving substrate.

That is, the matching layer of Hamada is provided for the purpose of matching between the optical multilayer filter 30 and the transparent resin of the resin portion 3, and preventing refraction of light between the optical multilayer filter 30 and the resin portion 3. By contrast, the claimed adjustment layers of the present invention are provided so as to prevent an amount of change in transmittance from changing sharply between layers, which structure and function is not provided by the matching layer of Hamada.

The portion in Hamada cited by the Examiner states that there may arise a need to add to the uppermost layer a matching film of a low refractive index for matching between the optical multilayer filter 30 and the transparent resin of the resin portion 3.

However, claim 18 requires that the sharpness preventing means comprise adjustment layers that were provided at at least two locations between the plurality of layers and on both ends of the

layered structure. Even if the matching layers that are referenced by the Examiner of Hamada could be considered an adjustment layer, they are still not provided at at least two locations between the plurality of layers, as well as on both ends of the layered structure.

Nor is there any reason to provide them within the layers that is taught by Hamada. In the present invention, the reason is to prevent an amount of change in transmittance from changing sharply between the plurality of layers. However, there is no such concern, and no structure taught to address such a concern, in Hamada.

The Examiner states that Hamada discloses that more than one matching layer can be used in addition to the inclusion of a matching layer as the uppermost film. For this reason, the Examiner concludes, it would have been obvious to modify the placement of the matching layers through routine experimentation in order to obtain the desired optical properties depending on the substrate used, citing that same portion of Hamada. However, this is not the case.

The matching layer film C is provided for matching the refractive index between the light-receiving substrate 2 and the optical multilayer film 30. Thus the only reason to provide it is at one end, as illustrated in Fig. 3.

The resin portion 3 is illustrated in Fig. 1. It surrounds the upper part of the optical multilayer filter 30. The additional matching layer that is discussed by Hamada is provided, depending on the refractive index of the resin portion 3, for matching between the optical multilayer filter 30 as a whole and the transparent resin of the resin portion 3. There is no reason provided in Hamada, whatsoever, for providing any other such matching layers. Accordingly, even if the matching layers can be considered as adjustment layers, Hamada fails to disclose the structure of claim 18, and fails to provide any reason to modify Hamada so as to arrive at the structure of claim 18.

For the above reason it is respectfully submitted that claim 18, along with all of the claims that depend therefrom, clearly define over Hamada. Indication of such is respectfully requested.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance, and the Examiner is requested to pass the case to issue. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact Applicant's undersigned representative.

Respectfully submitted,

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